

**A NEW SPECIES OF *LEPTOGLOSSUS* (HETEROPTERA:  
COREIDAE: ANISOSCELINI) ASSOCIATED WITH THE  
AMAZONIAN PALM *MAURITIA FLEXUOSA*  
(ARECACEAE: LEPIDOCARYEAE) IN PERU<sup>1</sup>**

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ABSTRACT: A new species, *Leptoglossus hesperus* (Heteroptera: Coreidae), collected in the Amazonian palm *Mauritia flexuosa* (Arecaceae: Lepidocaryeae), is described from Peru and compared with *L. lonchooides* Allen. The hind leg and male genital capsule are illustrated.

KEY WORDS: *Leptoglossus*, Heteroptera, Coreidae, *Mauritia flexuosa*, Arecaceae.

Previous to this paper only one species of *Leptoglossus*, (*L. lonchooides* Allen 1969) has been associated with palms (Couturier et al., 1993, Schaeffer and Panizzi 2000, and Howard et al., 2001).

*Leptoglossus lonchooides* was reported damaging fruits of *Bactris gasipaes* H. B. K. (Palmae), in Central Amazonia. The fruit suffered premature fruit fall that considerably reduced yields in Manaus, Brazil (Couturier et al. 1993).

In this contribution, we add a second species of *Leptoglossus* associated with the Amazonian palm *Mauritia flexuosa* L. f., in which the fruit is harvested by the rural population in the Peruvian Amazon to be consumed as fresh product (Padoeh 1988). The presence of both adults and nymphs on the palm trees indicates that *L. hesperus*, completes its entire life cycle in this palm.

In addition to *L. hesperus* four other species of *Leptoglossus* are recorded from the Peruvian region: *L. cinctus* (H. S.), *L. flavosignatus* Blote, *L. neovexillatus* Allen, and *L. zonatus* (Dallas) (Allen 1969, and Brailovsky and Barrera 1998).

Acronyms used in this paper are: Muséum National d' Histoire Naturelle, Paris, France (MNHN), Universidad Agraria La Molina, Museo de Entomología, Lima, Peru (UAMP), and Colección Entomológica, Instituto de Biología, Universidad Nacional Autónoma de México (UNAM). All measurements are given in millimeters.

***Leptoglossus hesperus*, NEW SPECIES**

Figures 2-3

**Description. Male. Dorsal coloration.** Head: dark orange with three broad black stripes, two lateral to midline, the other close to eyes; antennal segment I black with inner face dirty orange, segments II and III pale chestnut orange with

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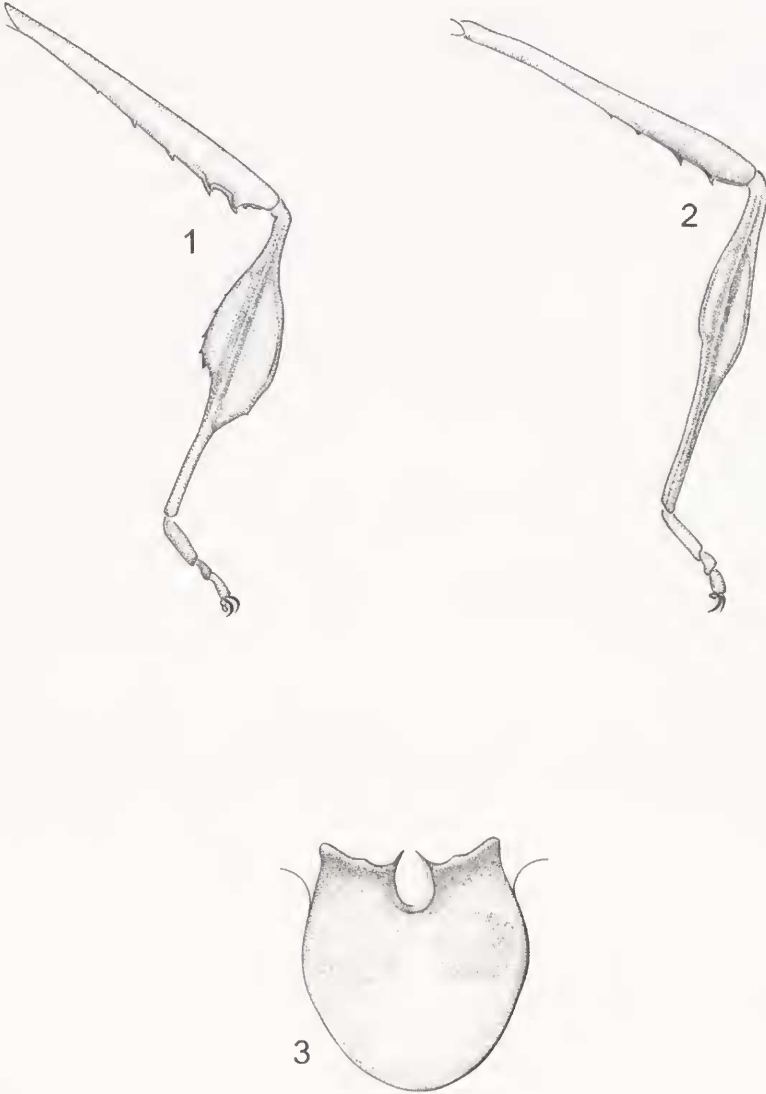
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apical joint black, and IV pale chestnut brown with basal third dark chestnut orange. Pronotum: anterolateral, posterolateral, and posterior border dirty yellow; disc pale reddish brown, tinged with yellow; collar, anterior margin, lateral portion of calli, anterolateral margin near the border, and humeral angle black. Scutellum: pale reddish brown with apex yellow. Hemelytra: clavus and corium pale reddish brown with costal margin yellow; corium with light yellow irregular, transverse fascia; hemelytral membrane uniformly dark. Abdomen: connexivum pale chestnut orange with anterior third and upper margin yellow; dorsal abdominal segments black with posterior margin of segments III to VI yellow. **Ventral coloration.** Head dirty orange yellow with four discoidal spots, two close to postocular tubercle, and the other two near middle third and close to posterior margin; rostral segments I and II dirty yellow, and III and IV bright reddish orange; thorax and abdomen dirty orange yellow with numerous small black spots; prosternum, lateral margins of mesosternum, and metasternum black; anterior and posterior lobe of metathoracic peritreme yellow; fore and middle legs bright chestnut orange; hind leg with coxae, trochanters, femur and tarsi bright chestnut orange; hind tibiae bright chestnut orange with outer and inner dilation bright reddish brown; genital capsule dirty orange yellow; rim of abdominal spiracles dirty yellow.

**Structure.** Body medium sized. **Head:** tylus unarmed, rounded apically, extending anteriorly to the jugae, and slightly raised in lateral view; rostrum reaching anterior third of abdominal sternite VI; rostral segment III extending to at least posterior margin of metasternum. **Pronotum:** collar wide; each pronotal margin entire; humeral angles rounded to obtuse, and not exposed; calli slightly elevated, impunctate, without two medial tubercles; surface densely punctate; disc posteriorly with median longitudinal carina obsolete. **Legs. Hind tibiae:** outer dilation short, lanceolate, entire, without emarginations, occupying 39% of the length of hind tibiae, width of outer dilation wider than width of inner dilation; inner dilation lanceolate, entire, without emarginations, shorter than outer, occupying 37% of the length of hind tibiae; undilated portion of hind tibiae without spine-like teeth (Fig. 2). **Scutellum:** triangular, longer than wide, flat, without median longitudinal carina; apex subtruncated. **Genitalia. Genital capsule:** posteroventral edge with median notch, deep and rounded; dorsal prongs prominently acute, and projecting medially (Fig. 3).

**Female. Coloration.** Similar to male. Antennal segment I dirty orange, segments II and III bright chestnut orange with apical third black, and IV pale chestnut brown with basal joint black; rostral segments I to IV dirty yellow; connexival segments VIII and IX dirty yellow; dorsal abdominal segments VIII and IX black with posterior margin of VIII yellow; hind tibiae bright chestnut orange with outer and inner dilation bright reddish brown with whitish yellow irregular maculae near middle third; genital plates dirty orange yellow; rim of abdominal spiracles light brown to yellow. **Structure.** Rostrum reaching anterior margin of abdominal sternite IV; rostral segment III reaching middle third of metasternum. **Legs. Hind tibiae:** outer dilation short, lanceolate, entire, occupying 57% of the

length of hind tibiae, width of outer dilation wider than width of inner dilation; inner dilation lanceolate, entire, shorter than outer, occupying 35% of the length of hind tibiae; undilated portion of hind tibiae with two small spine-like teeth.



Figures 1-3. *Leptoglossus* spp. 1-2. Hind leg. 1. *L. lonchoides* Allen. 2. *L. hesperus* Brailovsky and Couturier. 3. Caudal view of the male genital capsule of *L. hesperus* Brailovsky and Couturier.

**Measurements.** (male, followed by female). Head length 2.35, 2.70, width across eyes 1.92, 2.30, interocular space 1.02, 1.35, interocellar space 0.47, 0.67, preocular distance 1.50, 1.67; length of antennal segments: I, 2.35, 2.75, II, 3.90, 4.20, III, 2.65, 3.00, IV, 4.35, 4.66. Pronotum: Length 2.55, 3.70, maximum width across calli 2.10, 2.65, maximum width across humeral angles 3.90, 5.20. Hind tibiae: Total length 7.15, 8.23, length outer dilation 2.85, 4.60, length inner dilation 2.65, 2.90, maximum width outer dilation 0.36, 0.61, maximum width inner dilation 0.21, 0.35. Scutellar length 1.65, 2.45, width 1.50, 2.30. Body length 15.50, 19.30.

**Type material.** Holotype: ♂, Peru: Departamento Loreto, Iquitos, km 8 carr. Iquitos-Nauta, 6-II-2001, J. Vazquez and C. Delgado (MNHN). Paratype: 1 male, same location as holotype (UNAM). 1 female, Peru: Departamento Loreto, Iquitos, Zungarococha, 25-IX-2001, J. Vazquez and C. Delgado (UAMP). 1 male, Peru: Departamento Loreto, Iquitos, km 17.5 carr. Iquitos-Nauta, 25-V-2001, J. Vazquez and C. Delgado (UAMP). 2 males, Peru: Departamento Loreto, Iquitos, Santa Clara "Simon Bolivar," 28-VIII-2001, J. Vazquez and C. Delgado (MNHN). 1 female, Peru: Departamento Loreto, Quisicocha, 11-V-2001, J. Vazquez and C. Delgado (UNAM). All specimens were collected on the Amazonian palm *Mauritia flexuosa* (Arecaceae: Lepidocaryeae).

**Biology.** Males, females, and nymphs of *Leptoglossus hesperus* were collected on the inflorescences of the Amazonian palm *Mauritia flexuosa* (Arecaceae: Lepidocaryeae), growing in an ecosystem referred to as named "aguaje enano" or "dwarf aguaje," in the surrounding area of Iquitos, Department of Loreto, in Peru.

*Mauritia flexuosa* is a dioic palm that grows on periodically or permanently flooded areas. It is distributed throughout northern South America, east of the Andes (below 500 m), and is recorded from Brazil (from northern Amazonia to the state of Bahia), Colombia, Ecuador, the Guianas, Peru, Trinidad and Venezuela. The height of the adult plant reaches 25 m, the inflorescences are more than 2 m long, and each female inflorescence can carry 400 to 500 fruits (Henderson et al., 1995).

**Discussion.** This species is most similar to *L. lonchooides* Allen, in having the thorax and abdomen dirty orange yellow with numerous small black spots, the corium with yellow irregular transverse fascia, hind tibiae with the outer and inner dilation lanceolate, entire, without emarginations, and the posteroventral edge of male genital capsule with deep median notch, and prominent dorsal prongs (Fig. 3). In *L. hesperus* new species, the width of outer and inner dilations of the hind tibiae are smaller (Figs. 1-2), and the rostrum in males extends to the anterior third of abdominal sternite VI and on to the anterior margin of abdominal sternite IV in females. In *L. lonchooides*, the rostrum is shorter, usually reaching only the posterior margin of abdominal sternite III.

**Etymology.** From the Latin "*hesperus*" meaning west.

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